



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

U.S. APPLICATION NUMBER NO.	FIRST NAMED APPLICANT	ATTY. DOCKET NO.
10/578,139 2292 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747	Shuji Miyagawa	2520-0132PUS1
		INTERNATIONAL APPLICATION NO.
		PCT/JP04/16776
LA. FILING DATE	PRIORITY DATE	
11/04/2004	11/04/2003	

CONFIRMATION NO. 4669
371 FORMALITIES LETTER



OC000000040311713

Date Mailed: 03/01/2010

NOTICE TO COMPLY WITH REQUIREMENTS FOR PATENT APPLICATIONS CONTAINING NUCLEOTIDE SEQUENCE AND/OR AMINO ACID SEQUENCE DISCLOSURES

Filing Date Granted

Applicant is given **TWO MONTHS FROM THE DATE OF THIS NOTICE** within which to comply with the sequence rules, 37 CFR §§ 1.821-1.825. Failure to comply with these requirements will result in **ABANDONMENT** of the application under 37 CFR § 1.821(g). Extension of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 CFR § 1.136. In no case may an applicant extend the period for response beyond the six-month statutory period. Direct the response to: Mail Stop Missing Parts, Commissioner for Patents, P.O. Box 1450, Alexandria VA 22313-1450.

Applicant filed a request or letter regarding the use of the computer readable form (CRF) of a sequence listing from another application as the CRF of the sequence listing in this application in lieu of filing a CRF in this application. The request or letter, however, does not comply with the requirements of 37 CFR 1.821(e) for the reason(s) listed below. Applicant must make the appropriate correction(s), or file a CRF in this application in compliance with 37 CFR 1.821(e), within the time period for reply set forth in the notice to avoid the abandonment of the instant application.

- No CRF has been filed for the other application, or the designated CRF from the other application is not compliant with 37 CFR 1.821-1.825.

For more information and a sample letter for requesting the use of a CRF from another application, see MPEP 2422.05. For more information regarding electronic filing of sequence listings, see the EFS-Web Legal Framework at <http://www.uspto.gov/ebc/portal/efs/legal.htm>.

Applicant is cautioned that correction of the above items may cause the specification and drawings page count to exceed 100 pages. If the specification and drawings exceed 100 pages, applicant will need to submit the required application size fee.

For questions regarding compliance to 37 CFR 1.821-1.825 requirements, please contact:

- For Rules Interpretation, call (571) 272-0951
- For Patentin Software Program Help, call Patent EBC at 1-866-217-9197 or directly at 703-305-3028 / 703-308-6845 between the hours of 6 a.m. and 12 midnight, Monday through Friday, EST.
- Send e-mail correspondence for Patentin Software Program Help @ ebc@uspto.gov

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

Registered users of EFS-Web may alternatively submit their reply to this notice via EFS-Web.
<https://sportal.uspto.gov/authenticate/AuthenticateUserLocalEPF.html>

For more information about EFS-Web please call the USPTO Electronic Business Center at **1-866-217-9197** or visit our website at <http://www.uspto.gov/ebc>.

If you are not using EFS-Web to submit your reply, you must include a copy of this notice.

BARBARA A CAMPBELL

Telephone: (703) 756-1461

RAW SEQUENCE LISTING

**The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.**

Application Serial Number: 10/578,139
Source: JFWO
Date Processed by STIC: 03/01/2007

ENTERED



IFWO

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/578,139

DATE: 03/01/2007

TIME: 14:45:41

Input Set : N:\efs\03_01_07\10578139_efs\2007022725200132PUS1ST25.txt
 Output Set: N:\CRF4\03012007\J578139.raw

3 <110> APPLICANT: MIYAGAWA , Shuji
 4 MATSUNAMI , Katsuyoshi
 6 <120> TITLE OF INVENTION: HLA-E CHIMERIC MOLECULE
 8 <130> FILE REFERENCE: 2520-0132PUS1
 10 <140> CURRENT APPLICATION NUMBER: US 10/578,139
 11 <141> CURRENT FILING DATE: 2006-05-03
 13 <160> NUMBER OF SEQ ID NOS: 92
 15 <170> SOFTWARE: PatentIn version 3.4
 17 <210> SEQ ID NO: 1
 18 <211> LENGTH: 21
 19 <212> TYPE: PRT
 20 <213> ORGANISM: Artificial Sequence
 22 <220> FEATURE:
 23 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic chimeric sequence
 24 SP of HLA-E
 27 <400> SEQUENCE: 1
 29 Met Val Asp Gly Thr Leu Leu Leu Leu Leu Ser Glu Ala Leu Ala Leu
 30 1 5 10 15
 33 Thr Gln Thr Trp Ala
 34 20
 37 <210> SEQ ID NO: 2
 38 <211> LENGTH: 90
 39 <212> TYPE: PRT
 40 <213> ORGANISM: Artificial Sequence
 42 <220> FEATURE:
 43 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic chimeric sequence
 44 a1 domain of HLA-E
 47 <400> SEQUENCE: 2
 49 Gly Ser His Ser Leu Lys Tyr Phe His Thr Ser Val Ser Arg Pro Gly
 50 1 5 10 15
 53 Arg Gly Glu Pro Arg Phe Ile Ser Val Gly Tyr Val Asp Asp Thr Gln
 54 20 25 30
 57 Phe Val Arg Phe Asp Asn Asp Ala Ala Ser Pro Arg Met Val Pro Arg
 58 35 40 45
 61 Ala Pro Trp Met Glu Gln Glu Gly Ser Glu Tyr Trp Asp Arg Glu Thr
 62 50 55 60
 65 Arg Ser Ala Arg Asp Thr Ala Gln Ile Phe Arg Val Asn Leu Arg Thr
 66 65 70 75 80
 69 Leu Arg Gly Tyr Tyr Asn Gln Ser Glu Ala
 70 85 90
 73 <210> SEQ ID NO: 3
 74 <211> LENGTH: 92

75 <212> TYPE: PRT

RAW SEQUENCE LISTING
 PATENT APPLICATION: US/10/578,139
 DATE: 03/01/2007
 TIME: 14:45:41
 Input Set : N:\efs\03_01_07\10578139_efs\2007022725200132PUS1ST25.txt
 Output Set: N:\CRF4\03012007\J578139.raw

76 <213> ORGANISM: Artificial Sequence
 78 <220> FEATURE:
 79 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic chimeric sequence
 80 a2 domain of HLA-E
 83 <400> SEQUENCE: 3
 85 Gly Ser His Thr Leu Gln Trp Met His Gly Cys Glu Leu Gly Pro Asp
 86 1 5 10 15
 89 Arg Arg Phe Leu Arg Gly Tyr Glu Gln Phe Ala Tyr Asp Gly Lys Asp
 90 20 25 30
 93 Tyr Leu Thr Leu Asn Glu Asp Leu Arg Ser Trp Thr Ala Val Asp Thr
 94 35 40 45
 97 Ala Ala Gln Ile Ser Glu Gln Lys Ser Asn Asp Ala Ser Glu Ala Glu
 98 50 55 60
 101 His Gln Arg Ala Tyr Leu Glu Asp Thr Cys Val Glu Trp Leu His Lys
 102 65 70 75 80
 105 Tyr Leu Glu Lys Gly Lys Glu Thr Leu Leu His Leu
 106 85 90
 109 <210> SEQ ID NO: 4
 110 <211> LENGTH: 92
 111 <212> TYPE: PRT
 112 <213> ORGANISM: Artificial Sequence
 114 <220> FEATURE:
 115 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic chimeric sequence
 116 a3 domain of HLA-E
 119 <400> SEQUENCE: 4
 121 Glu Pro Pro Lys Thr His Val Thr His His Pro Ile Ser Asp His Glu
 122 1 5 10 15
 125 Ala Thr Leu Arg Cys Trp Ala Leu Gly Phe Tyr Pro Ala Glu Ile Thr
 126 20 25 30
 129 Leu Thr Trp Gln Gln Asp Gly Glu Gly His Thr Gln Asp Thr Glu Leu
 130 35 40 45
 133 Val Glu Thr Arg Pro Ala Gly Asp Gly Thr Phe Gln Lys Trp Ala Ala
 134 50 55 60
 137 Val Val Val Pro Ser Gly Glu Glu Gln Arg Tyr Thr Cys His Val Gln
 138 65 70 75 80
 141 His Glu Gly Leu Pro Glu Pro Val Thr Leu Arg Trp
 142 85 90
 145 <210> SEQ ID NO: 5
 146 <211> LENGTH: 63
 147 <212> TYPE: PRT
 148 <213> ORGANISM: Artificial Sequence
 150 <220> FEATURE:
 151 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic chimeric sequence
 152 Transmembrane domain of HLA-E
 155 <400> SEQUENCE: 5
 157 Lys Pro Ala Ser Gln Pro Thr Ile Pro Ile Val Gly Ile Ile Ala Gly
 158 1 5 10 15
 161 Leu Val Leu Leu Gly Ser Val Val Ser Gly Ala Val Val Ala Ala Val
 162 20 25 30

RAW SEQUENCE LISTING DATE: 03/01/2007
 PATENT APPLICATION: US/10/578,139 TIME: 14:45:41

Input Set : N:\efs\03_01_07\10578139_efs\2007022725200132PUS1ST25.txt
 Output Set: N:\CRF4\03012007\J578139.raw

165 Ile Trp Arg Lys Lys Ser Ser Gly Gly Lys Gly Ser Tyr Ser Lys
 166 35 40 45
 169 Ala Glu Trp Ser Asp Ser Ala Gln Gly Ser Glu Ser His Ser Leu
 170 50 55 60
 173 <210> SEQ ID NO: 6
 174 <211> LENGTH: 63
 175 <212> TYPE: DNA
 176 <213> ORGANISM: Artificial Sequence
 178 <220> FEATURE:
 179 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic chimeric
 sequence
 180 SP of HLA-E
 183 <400> SEQUENCE: 6
 184 atggtagatg gaaccctcct tttactcctc tcggaggccc tggcccttac ccagacctgg 60
 186 gcg 63
 189 <210> SEQ ID NO: 7
 190 <211> LENGTH: 270
 191 <212> TYPE: DNA
 192 <213> ORGANISM: Artificial Sequence
 194 <220> FEATURE:
 195 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic chimeric
 sequence
 196 a1 domain of HLA-E
 199 <400> SEQUENCE: 7
 200 ggctcccaact ccttgaagta tttccacact tccgtgtccc ggccggccg cggggagccc 60
 202 cgcttcatct ctgtgggcta cgtggacgac acccagttcg tgcgttca caacgacgcc 120
 204 gcgagtccga ggtatgggcc gcgggcggcc tggatggacg aggaggggtc agagtattgg 180
 206 gaccgggaga cacggagcgc cagggacacc gcacagattt tccgagtcaa tctgeggacg 240
 208 ctgcgcgcgt actacaatca gagcgggccc 270
 211 <210> SEQ ID NO: 8
 212 <211> LENGTH: 276
 213 <212> TYPE: DNA
 214 <213> ORGANISM: Artificial Sequence
 216 <220> FEATURE:
 217 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic chimeric
 sequence
 218 a2 domain of HLA-E
 221 <400> SEQUENCE: 8
 222 gggcttcaca ccctgcagtg gatgcattggc tgcgagctgg ggccggacag gcgcttcctc 60
 224 cgcgggtatg aacagttcgc ctacgacggc aaggattatc tcaccctgaa tgaggacctg 120
 226 cgctccttggc cccgggtggc cacggcggt cagatctccg agcaaaaatgc aaatgtatgcc 180
 228 tctgaggccgg aacaccagag agcctacctg gaagacacat gcgtggagtg gctccacaaa 240
 230 tacctggaga agggaaagga gacgctgctt cacctg 276
 233 <210> SEQ ID NO: 9
 234 <211> LENGTH: 276
 235 <212> TYPE: DNA
 236 <213> ORGANISM: Artificial Sequence
 238 <220> FEATURE:
 239 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic chimeric
 sequence
 240 a3 domain of HLA-E
 243 <400> SEQUENCE: 9
 244 gagcccccgg agacacacgt gactcaccac cccatctctg accatgaggc caccctgagg 60

RAW SEQUENCE LISTING DATE: 03/01/2007
 PATENT APPLICATION: US/10/578,139 TIME: 14:45:41

Input Set : N:\efs\03_01_07\10578139_efs\2007022725200132PUS1ST25.txt
 Output Set: N:\CRF4\03012007\J578139.raw

246 tgctggggccc tgggcttcta ccctgcggag atcacactga cctggcagca ggatggggag 120
 248 ggcataccccc aggacacgga gtcgtggag accaggcctg cagggatgg aaccttccag 180
 250 aagtgggcag ctgtgtggt gcctctgga gaggagcaga gatacacgtg ccatgtgcag 240
 252 catgaggggc taccggagcc cgtcaccctg agatgg 276
 255 <210> SEQ ID NO: 10
 256 <211> LENGTH: 192
 257 <212> TYPE: DNA
 258 <213> ORGANISM: Artificial Sequence
 260 <220> FEATURE:
 261 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic chimeric sequence
 262 Transmembrane domain of HLA-E
 265 <400> SEQUENCE: 10
 266 aagccggcgtt cccagccac catccccatc gtgggcatca ttgctggcct ggtttcctt 60
 268 ggatctgtgg tctctggagc tgtggttgt gctgtatat ggaggaagaa gagctcaggt 120
 270 gaaaaaggag ggagctactc taaggctgag tggagcgcaca gtgcccaggg gtctgagtct 180
 272 cacagcttgg aa 192
 275 <210> SEQ ID NO: 11
 276 <211> LENGTH: 24
 277 <212> TYPE: PRT
 278 <213> ORGANISM: Artificial Sequence
 280 <220> FEATURE:
 281 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic chimeric sequence
 282 SP of HLA-G1
 285 <400> SEQUENCE: 11
 287 Met Val Val Met Ala Pro Arg Thr Leu Phe Leu Leu Leu Ser Gly Ala
 288 1 5 10 15
 291 Leu Thr Leu Thr Glu Thr Trp Ala
 292 20
 295 <210> SEQ ID NO: 12
 296 <211> LENGTH: 90
 297 <212> TYPE: PRT
 298 <213> ORGANISM: Artificial Sequence
 300 <220> FEATURE:
 301 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic chimeric sequence
 302 a1 domain of HLA-G1
 305 <400> SEQUENCE: 12
 307 Gly Ser His Ser Met Arg Tyr Phe Ser Ala Ala Val Ser Arg Pro Gly
 308 1 5 10 15
 311 Arg Gly Glu Pro Arg Phe Ile Ala Met Gly Tyr Val Asp Asp Thr Gln
 312 20 25 30
 315 Phe Val Arg Phe Asp Ser Asp Ser Ala Cys Pro Arg Met Glu Pro Arg
 316 35 40 45
 319 Ala Pro Trp Val Glu Gln Glu Gly Pro Glu Tyr Trp Glu Glu Glu Thr
 320 50 55 60
 323 Arg Asn Thr Lys Ala His Ala Gln Thr Asp Arg Met Asn Leu Gln Thr
 324 65 70 75 80
 327 Leu Arg Gly Tyr Tyr Asn Gln Ser Glu Ala
 328 85 90
 331 <210> SEQ ID NO: 13

RAW SEQUENCE LISTING
 PATENT APPLICATION: US/10/578,139
 DATE: 03/01/2007
 TIME: 14:45:41
 Input Set : N:\efs\03_01_07\10578139_efs\2007022725200132PUS1ST25.txt
 Output Set: N:\CRF4\03012007\J578139.raw

332 <211> LENGTH: 92
 333 <212> TYPE: PRT
 334 <213> ORGANISM: Artificial Sequence
 336 <220> FEATURE:
 337 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic chimeric sequence
 338 a2 domain of HLA-G1
 341 <400> SEQUENCE: 13
 343 Ser Ser His Thr Leu Gln Trp Met Ile Gly Cys Asp Leu Gly Ser Asp
 344 1 5 10 15
 347 Gly Arg Leu Leu Arg Gly Tyr Glu Gln Tyr Ala Tyr Asp Gly Lys Asp
 348 20 25 30
 351 Tyr Leu Ala Leu Asn Glu Asp Leu Arg Ser Trp Thr Ala Ala Asp Thr
 352 35 40 45
 355 Ala Ala Gln Ile Ser Lys Arg Lys Cys Glu Ala Ala Asn Val Ala Glu
 356 50 55 60
 359 Gln Arg Arg Ala Tyr Leu Glu Gly Thr Cys Val Glu Trp Leu His Arg
 360 65 70 75 80
 363 Tyr Leu Glu Asn Gly Lys Glu Met Leu Gln Arg Ala
 364 85 90
 367 <210> SEQ ID NO: 14
 368 <211> LENGTH: 92
 369 <212> TYPE: PRT
 370 <213> ORGANISM: Artificial Sequence
 372 <220> FEATURE:
 373 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic chimeric sequence
 374 a3 domain of HLA-G1
 377 <400> SEQUENCE: 14
 379 Asp Pro Pro Lys Thr His Val Thr His His Pro Val Phe Asp Tyr Glu
 380 1 5 10 15
 383 Ala Thr Leu Arg Cys Trp Ala Leu Gly Phe Tyr Pro Ala Glu Ile Ile
 384 20 25 30
 387 Leu Thr Trp Gln Arg Asp Gly Glu Asp Gln Thr Gln Asp Val Glu Leu
 388 35 40 45
 391 Val Glu Thr Arg Pro Ala Gly Asp Gly Thr Phe Gln Lys Trp Ala Ala
 392 50 55 60
 395 Val Val Val Pro Ser Gly Glu Gln Arg Tyr Thr Cys His Val Gln
 396 65 70 75 80
 399 His Glu Gly Leu Pro Glu Pro Leu Met Leu Arg Trp
 400 85 90
 403 <210> SEQ ID NO: 15
 404 <211> LENGTH: 40
 405 <212> TYPE: PRT
 406 <213> ORGANISM: Artificial Sequence
 408 <220> FEATURE:
 409 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic chimeric sequence
 410 Transmembrane domain of HLA-G1
 413 <400> SEQUENCE: 15
 415 Lys Gln Ser Ser Leu Pro Thr Ile Pro Ile Met Gly Ile Val Ala Gly
 416 1 5 10 15

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/578,139

DATE: 03/01/2007

TIME: 14:45:42

Input Set : N:\efs\03_01_07\10578139_efs\2007022725200132PUS1ST25.txt
Output Set: N:\CRF4\03012007\J578139.raw

BOX SEQUENCE
PATENT
2520-0132PUS1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:
MIYAGAWA , Shuji et al.

Application No.: 10/578,139

Confirmation No.: 4669

Filed: May 3, 2006

Art Unit: Not Yet Assigned

For: HLA-E CHIMERIC MOLECULE

Examiner: Not Yet Assigned

RESPONSE TO NOTICE TO COMPLY

Commissioner for Patents
P.O. BOX 1450
Alexandria, VA 22313-1450

Sir:

Applicants have received a Notice to Comply with Requirements for Patent Applications Containing Nucleotide Sequence and/or Amino Acid Sequence Disclosures mailed March 1, 2010.

Applicants first note that a Sequence Listing for the present application has been received as evidenced by its appearance on PAIR (see attached printout). A Computer Readable Form (CRF) copy and amendment were submitted concurrent with the Sequence Listing found on PAIR.

Despite already submitting the CRF copy and only to expedite processing, Applicants enclose herewith a Substitute Sequence Listing in full compliance with 37 C.F.R. §§1.821-1.825. The Substitute Sequence Listing in no way introduces new matter into the specification. Also submitted herewith in full compliance with 37 C.F.R. §§1.821-1.825 is an electronic CRF copy of the Substitute Sequence Listing. The electronic CRF copy of the Substitute Sequence Listing, file "2007-02-27 2520-

0132PUS1_ST25.txt", is identical to the paper copy, except that it lacks formatting. The enclosed paper copy and the electronic CRF copy of the Substitute Sequence Listing do not include new matter.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

BIRCH, STEWART, KOLASCH & BIRCH, LLP

APR 30 2010

By 
for Gerald M. Murphy, Jr., #28,977
BIRCH, STEWART, KOLASCH & BIRCH, LLP
P.O. Box 747
Falls Church, VA 22040-0747
(703) 205-8000

GMM/psq
2520-0132PUS1

Attachments: Electronic CRF Copy of Substitute Sequence Listing
 Paper Copy of Substitute Sequence Listing
 Copy of Notice to Comply
 Copy of PAIR printout